

## CLAIMS

- 1 1. A method of providing anonymous digital cash, said method comprising:  
2 providing an entity with a secure co-processor;  
3 a user establishing a secure channel to a program running on said coprocessor;  
4 and  
5 the user sending a coin to be digitally signed to the coprocessor using any  
6 secure digital signature algorithm.
  
- 1 2. A method according to Claim 1, further comprising the steps of:  
2 the processor providing a signature to authenticate;  
3 the user using said coin for payment to a merchant; and  
4 the merchant returning the signed coin to the entity for credit to an account of  
5 the merchant.
  
- 1 3. A method of creating and managing electronic cash, comprising the steps:  
2  
3 a customer communicating to a secure cryptography generator an encryption scheme  
4 and a cash amount;  
5 establishing a unit representing the cash amount;  
6 signing the unit;  
7 using the secure cryptography generator to encrypt the signed unit using the  
8 encryption scheme;  
9 storing in a database the encrypted signed unit and a value for the unit;  
10 transmitting the encrypted signed unit to the customer;  
11 the customer decrypting the encrypted signed unit to obtain the signed unit; and  
12 using the signed unit as a payment.

1 4. A method according to Claim 3, further including the steps of:  
2 establishing an expiration date for the unit; and  
3 storing the expiration date in the database.

1 5 A method according to Claim 3, wherein the signing step includes the step of  
2 using the secure cryptography generator to sign the unit.

1 6. A method according to Claim 3, wherein the signing step includes the step of  
2 signing the unit with a non-homomorphic signature.

1 7. A system for creating and managing electronic cash, comprising the steps:  
2  
3 a secure cryptography generator, including means for receiving an encryption scheme  
4 and a cash amount from a customer;  
5 means for establishing a unit representing the cash amount;  
6 means for signing the unit;  
7 wherein the secure cryptography generator encrypt the signed unit using the  
8 encryption scheme;  
9 a database for storing the encrypted signed unit and a value for the unit;  
10 means for transmitting the encrypted signed unit to the customer; and  
11 means for the customer to decrypt the encrypted signed unit to obtain the signed unit,  
12 wherein the customer is able to use the signed unit as a payment.

1 8. A system according to Claim 7, further including means for establishing an  
2 expiration date for the unit, and wherein  
3 the expiration date is stored in the database.

1 9. A system according to Claim 7, wherein the secure cryptography generator  
2 includes means for signing the unit.

1 10. A system according to Claim 7, wherein the means for signing includes means  
2 for signing the unit with a non-homomorphic signature.

1 11. A program storage device readable by machine, tangibly embodying a program  
2 of instructions executable by the machine to perform method steps for creating and  
3 managing electronic cash, said method steps comprising:

4

5 using a secure cryptography generator to receive from a customer an encryption  
6 scheme and a cash amount;

7 establishing a unit representing the cash amount;

8 signing the unit;

9 using the secure cryptography generator to encrypt the signed unit using the  
10 encryption scheme;

11 storing in a database the encrypted signed unit and a value for the unit;

12 transmitting the encrypted signed unit to the customer;

13 decrypting the encrypted signed unit to obtain the signed unit; and

14 using the signed unit as a payment.

1 12. A program storage device according to Claim 11, wherein said method steps  
2 further include the steps of:  
3 establishing an expiration date for the unit; and  
4 storing the expiration date in the database.

1 13. A program storage device according to Claim 11, wherein the signing step  
2 includes the step of using the secure cryptography generator to sign the unit.

1 14. A program storage device according to Claim 13, wherein the signing step  
2 includes the step of signing the unit with a non-homomorphic signature.

